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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,065	04/08/2004	Bert Zauderer	04500006US	7222
7055 7590 02/21/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER VAN DYKE, TIMOTHY C	
			ART UNIT	PAPER NUMBER
			1754	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		02/21/2007	ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/21/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

**Office Action Summary**

Application No.

10/820,065

Applicant(s)

ZAUDERER, BERT

Examiner

Timothy C. Vanoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 7-20 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 6 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>Sept. 6, 2005</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

- a) Claim 3 is objected to because it does not appear to be a proper limitation to the claimed process in as much as it sets forth a commercial transaction.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a) Claim 1 does not particularly point out and distinctly set forth what it is that is "changed" in the processes for gasifying the fuels.
- b) Claim 1 does not particularly point out and distinctly set forth any steps for sequestering the carbon dioxide, as set forth in the preamble of this claim.
- c) Claim 2 does not particularly point out and distinctly set forth what the two components are that are represented by the ratio of 0.60 to 0.8.
- d) Claim 2 does not particularly point out how a ratio of 0.60 to 0.8 can be considered "stoichiometric".
- e) The term "near" in claim 4 is a relative term which renders the claim indefinite. The term "near" is not defined by the claim, the specification does not provide a

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standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

f) Claims 4 and 6 do not particularly point out with what the carbon dioxide is sequestered with.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the reference titled "Technical Progress in the Development of Zero Emission Coal Technologies" by H. J. Ziock et al.

Fig. 2 on pg. 4 of this Ziock et al. reference illustrates a method for sequestering carbon dioxide emitted from the gasification of coal, comprising:

gasifying coal by a gasification process that has been changed by re-cycling a portion of the water generated by a downstream fuel cell into the gasifier;

subjecting the gasification off-gas to a gas clean-up step to remove particulates and SO<sub>x</sub>, and

sequestering the carbon dioxide generated from the gasification process.

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Claims 2-15 have not been rejected under either 35USC102 or 35USC103 because the limitations of these claims have not been taught or suggested by the reference titled "Technical Progress in the Development of Zero Emission Coal Technologies" by H. J. Ziock et al.

Claims 16-20 have not been rejected under either 35USC102 or 35USC103 because U. S. Patent 6,669,917 B2 discloses the treatment of coal char in a gasification reactor (please see the abstract), but not the burners or boiler of a coal fired power plant.

The following references are made of record:

U. S. Patent App'n. Pub. No. US 2006/0185985 A1 disclosing the removing of carbon dioxide from waste streams through co-generation of carbonate and/or bicarbonate minerals;

U. S. Patent App'n. Pub. No. US 2004/0126293 A1 disclosing a process for the removal of carbon dioxide from flue gases;

U. S. Patent App'n. Pub. No. US 2006/0048517 A1 disclosing a process and plant for recycling carbon dioxide emissions from power plants into useful carbonated species;

U. S. Patent App'n. Pub. No. US 2004/0001788 A1 disclosing a steam generating combustion system and method for emission control;

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U. S. Patent App'n. Pub. No. US 2003/0029088 A1 disclosing a process for converting coal into fuel cell quality hydrogen and sequestration-ready carbon dioxide, and

U. S. Patent 7,083,658 B2 disclosing a hot solids gasifier with carbon dioxide removal and hydrogen production.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy C. Vanoy whose telephone number is 571-272-8158. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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*Timothy C Vanoy*  
Timothy C Vanoy  
Primary Examiner  
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